

## Hon'ble Prime Minister of India Inaugurated SAUNI Project



SPML Infra has completed Link II, Package 3 of **Saurashtra Narmada Avtran Irrigation (SAUNI Yojana)**, an important irrigation project in Gujarat. Hon'ble Prime Minister of India, Shri Narendra Modi ji in the presence of Shri Vijay Rupani, Hon'ble Chief Minister of Gujarat and other dignitaries inaugurated the completion of Phase-I of SAUNI project in Botad, Gujarat on 17<sup>th</sup> April, 2017.

SPML Infra scope comprised construction of pumping stations with capacity of 13,475 M<sup>3</sup>/hr with 30 meters head; supply and laying of 20.47 Kms Twin MS pipeline (total pipe laying 40.95 Kms) of 3000 mm diameter of 17.5 mm thickness with external 3LPE coating & internal food grade epoxy coating; 66Kv Switch Yard, SCADA system and allied works along with 10 years of O&M.



### Hon'ble Chief Minister of Rajasthan, Smt. Vasundhra Raje visited SPML Infra Project site at Sawai Madhopur to review the progress of Chambal - Sawai Madhopur - Nadauti Water Supply Project

Chambal-Sawai Madhopur-Nadauti Water Supply Project will provide drinking water facility to 926 villages and 4 towns, Sawai Madhopur, Gangapur, Karauli and Todabhim. These areas are adversely affected due to high nitrates, chlorides and dissolved solid contents in ground water and is not fit for human consumption.

SPML Infra is executing this important water supply project to provide drinking water facility to almost 3 million population of the project area. The project got delayed due to environmental clearance. The scope of work includes:

- 146.75 MLD Water Treatment Plant
- 152 Kms MS & PSC pipeline of 1000-1400 mm dia
- 17 Mtr dia Intake Well
- 800 Mtr Transmission Bridge of 6 x 22.5 Mtrs
- Pre-settling Tank of 27.50 ML capacity
- Raw Water Pumping Station
- Clear Water Pumping Station
- Clear Water Reservoirs having capacity of 14000 Cum, 8010
  Cum, 3610 Cum & 2510 Cum at different headworks
- 33 Kv Power Transmission Lines
- 5 years of Operation & Maintenance













### **TECHNOLOGY ENABLES BOP TO OVERCOME SLUGGISHNESS**



Subhash Sethi Chairman, SPML Infra Ltd.

#### Has there been a perceptible change in the business in last two years?

The power sector in India has undergone significant change in past few years. The generation capacity has increased from a mere 1362 MW after independence to reach 302 GW by the end of 2016. To meet the growing power demand in India, resource generation capacities are being enhanced continuously and coal based thermal power plants are still the main sources of generating electricity. Wind and solar generating capacity have increased many folds over the past few years. The balance of plant business has also transformed from coal and thermal to include solar, wind, hydel and other renewable energy projects. SPML has executed a number of civil construction and balance of power plant packages besides developing optimum design for auxiliary packages like coal and ash handling, HVAC, water systems, firefighting systems, electrical and control & instrumentation etc. With the changes happening in past few years, our power division has integrated its strength in basic & in-depth engineering, process technology, project management, procurement, fabrication & erection, construction and commissioning to provide highly specialized services to power sector.

#### What has changed in BoP business in last few years regarding technology?

Technology is always changing and being adopted by different sectors as per their requirements. Power sector has also been adopting the changes as new technology is providing better efficiency and results. The robotic technology and artificial intelligence has transformed working environment rendering even quite sophisticated skills redundant. Last few years has seen adoption of new age construction technologies including precast constructions, smart and green building, solar powered smart pumps and other various innovative tools to curb costs, reduce timelines and improve safety standards during project execution. The technology has helped to get Cogeneration and Trigeneration power plants that are more efficient than central power plants with economic benefits and advantages. Trigeneration plants are energy efficient, conserve natural resources and reduce fuel consumption as the system operates at such high efficiencies and help our environment by reducing greenhouse gas emissions such as carbon dioxide as compared to typical power plants. The past few years have seen exciting changes with the use of technology from easy-to-operate machines, energy conservation, waste utilisation, plant execution to operation & maintenance to improve the functioning and productivity.

#### Do you expect Indian BoP Companies to consolidate to overcome the sluggishness?

India's economy is growing with the rise in industrial and commercial activity in the country. With the growth in economy, energy demand has also seen growth of almost 7 per cent year on year basis. The key factors of this phenomenal demand rise are; fast growth in manufacturing sector, rural electrification schemes to connect almost 1.25 lac villages with electricity, the growth pattern of residential consumptions with more electric gadgets being used. The Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) scheme focuses on strengthening of sub-transmission & distribution infrastructure including metering at all levels in rural areas. This will help in providing round the clock power to rural households and adequate power for agriculture. Apart from this, there are several government schemes to further electricity generation, transmission and distribution across the country. With electricity production of 1,107.8 BU in FY16, the country witnessed growth of around 5.64 per cent over the previous year. During April-September 2016, electricity production in India reached 584.22 BU registering a substantial growth. With more power projects being planned to increase energy production both from conventional and non-conventional sources, we feel that BoP companies will be able to have good businesses in coming years.

## PROJECT UPDATE

### **Gagreen Water Supply Scheme, Rajasthan**

The first phase of Gagreen water supply project to provide drinking water facilities to 55 villages is nearing completion. The work for remaining villages and dhanies of Pidawa and Gangdhar tehsil is in progress. The scope of work includes raw water transmission system, 19 MLD water treatment plant, 7 clear water reservoirs of 200-1500 KL, 6 nos of pumping stations with combined capacity of 3525 M3/hr, 1515 kms water pipeline of 63-600 mm dia, 53 elevated service reservoirs with cluster distribution system, village distribution system, PLC & SCADA with 10 years of operation & maintenance. Shri Yunus Khan, Minister of PWD and District Incharge of Jhalawar visited the site to review the work.



### 24x7 Water Supply Project, Bellari, Karnataka

The infrastructure development work of urban water supply project to provide 24x7 drinking water facilities to more than 4,10,000 consumers in Bellari is under progress. Water supply pipeline is being laid and smart water meters are being installed at consumer households. The scope of work involves operations & maintenance of 453 kms of water distribution network, 3 water treatment plants with 85 MLD combined capacity, 12 elevated service reservoirs with total 11 ML capacity, 3 clear water and 1 raw water pumping station, 70,000 Nos. of house service connections, metering, billing and collection with 24x7 consumer service centre including 5 years of operation & maintenance.



## PROJECT UPDATE

### 50 MLD Water Treatment Plant, Dholera, Gujarat

The construction work for 50 MLD water treatment plant (WTP), clear water reservoir and water transmission system in Dholera, Gujarat has started. WTP will provide the basic requirement of potable water for the industrial, residential, commercial and other developments to Dholera Special Investment Region being developed under Delhi Mumbai Industrial Corridor. SPML will also be responsible for 5 years of operation & maintenance after the completion.



### Pokhran Water Supply Project, Rajasthan

The work of Pokhran Water Supply Project, Package-2B has started with the excavation work for pipe laying. This project aims to provide sustainable source of drinking water to over a million people of 580 villages (177 of Jaisalmer and 403 of Barmer districts) together with 3 towns- Pokhran, Balotra and Siwana and also caters the bulk clear water demands of defense forces and industries. Scope of work includes supply, laying and commissioning of 194 kms of GRP, BWSC, MS, and DI pipeline of 150-1200 mm diameters.



### Nagaur Lift Project, Rajasthan

The Nagaur Lift Project is under execution and water has reached to the clear water reservoir having capacity of 4050 KL from the existing pumping station at Gogalav, which is almost 94 kms from the reservoir. The scope of project includes construction of cluster distribution net work, pump houses, clear water reservoirs, over head service reservoirs, 33KV switchyards, village distribution network with operation and maintenance of for 10 years.



# PROJECT UPDATE

### 400 kV Twin Moose Transmission Line, Bhilwara, Rajasthan

The construction and erection of 400 kV Twin Moose Transmission Line between from proposed 400 Kv substations at Chittorgarh to 400 Kv substation at Bhilwara is a challenging project due to difficult terrain and hostile weather conditions. SPML Infra is executing. Under the project, 134 transmission tower of 45-70 meters height has to be erected for in the length of 50 kms. Till date 131 towers has already been erected and work on remaining 3 towers are underway.



### Power Distribution & Supply Project, Bhagalpur, Bihar

The power distribution and supply project in Bhagalpur strives to reduce the collection and distribution losses with infrastructure development and augmentation by implementing new age technology for smart metering, asset indexing on cloud, online billing & payment, round the clock consumer complaint centre among many others.



## 400/220 Kv Substation, Sikar, Rajasthan

The construction and erection work for the extension of 400/220 Kv Substation along with 500 MVA auto transformer and 220 Kv line bays are under progress. Once completed, it will help in augmenting power distribution and supply to Sikar and other areas.



# **The Four Phases of Project Management**

Whether you are developing a website, designing a car, developing infrastructure project, updating an information system, or just about any other project (large or small), you'll go through the same four phases of project management: **Planning, Build-up, Implementation,** and **Closeout.** Even though the phases have distinct qualities, they overlap. For example, you'll typically begin planning with estimated budget figure and an projected completion date. Once you're in the build-up and implementation phases, you'll define and begin to execute the details of the project plan. That will give you critical information, so you'll revise your budget and end date—in other words, do more planning—according to your clearer understanding of the big picture

Here's an overview of each phase and the activities involved.

#### Planning: How to Map Out a Project

When people think of project planning, their minds tend to jump immediately to scheduling—but you won't even get to that part until the build-up phase. Planning is really about defining fundamentals: what problem needs solving, who will be involved, and what will be done.

#### Determine the real problem to solve

Take time to pinpoint what issue the project is actually supposed to address. If you don't, you'll run the risk of wasting time and money by creating a solution that is too simplistic, too complicated, or too late—or one that doesn't do what your client need it to do.

#### Identify the stakeholders

The real problem will become even clearer once you figure out who will use and benefit from the project. Their opinion will work with you to spell out exactly what success on the project means. If the stakeholder changes or added midstream, be prepared to respond to the new.

#### Define project objectives

Most challenging task in planning is to meld stakeholders' various expectations into a coherent and manageable set of goals. The project's success will be measured by how well you meet those goals. The more explicitly you state them at the outset, the less disagreement you will face later about whether you have met expectations. In the planning phase, however, much is still in flux, so you'll revise your objectives later on as you gather information about what you need to achieve.

#### Determine scope, resources, and major tasks

Many projects fail either because they bite off more than they can chew and thus grossly underestimate time and money or because a significant part of the work has been overlooked. One tool that can help you avoid these problems is the Work Breakdown Structure (WBS), which helps in the process of determining scope and tasks and developing estimates. As a result of your thoughtful planning, you'll be able to rough out an estimate of how many people—with what skills—you'll need for the project. You'll also have a good idea of how long the project will take.

#### Prepare for trade-offs

Time, cost, and quality are three related variables that typically dictate what you can achieve.

#### Quality = Time + Cost

Knowing from the start which variable is most important will help you make the right changes along the way. Tell everybody involved about the changes and what the consequences will be in terms of time, cost, and quality.

#### **Build-Up: How to Get the Project Going**

In the build-up phase, you bring your team together. Time estimates become schedules. Cost estimates become budgets. You gather your resources. You get commitments, and you make them.

#### Assemble your team

First task in this phase is to assess the skills needed for the project so you can get the right people. This assessment flows directly from the Work Breakdown Structure you did during the planning phase, in which you developed your best estimate of the necessary tasks and activities. Don't forget to budget time and money for training to cover any gaps you can't fill with people who are already there.

#### Plan assignments

With team in place, its already decided who will do what. Or, if you've inherited a team but worked with the members before, you can still make the assignments yourself. But if a new, unfamiliar group is assigned to you, list the people on the team, list the skills required, and talk to each team member about his own skill set before you match people to tasks.

#### Create the schedule

Most projects come with fixed beginning and end dates, regardless of available resources. To create a realistic schedule within those constraints, work backward from any drop-dead deadlines you know about—that is, dates that cannot be changed—to see when your deliverables must be ready.

#### Hold a kickoff meeting

Bring all team members together for a kickoff meeting. Go over the project's plan and objectives with the group in as much detail as possible, and review the proposed time frame. Be sure to clarify roles and responsibilities. Encourage people to point out spots where problems may occur and where improvements could be made. Take all suggestions seriously, especially in areas where the team members have more experience than you do and adjust your estimates and activities accordingly.

#### Develop a budget

To determine your costs, break down the project into the following categories: Personnel, Travel, Machineries, Supplies, Storage, Power requirement, Capital expenditures, Training, and Overhead. A budget, no matter how carefully planned, is just your best guess. Expect actual numbers to deviate from original estimates, and stay as flexible as possible within your limitations of time, quality demands, and total money available.

#### Implementation: How to Execute the Project

It's time to put the plan into action. The implementation phase is often the most gratifying, because work actually gets done, but it can also be the most frustrating. The details can be tedious and, at times, overwhelming.

#### Monitor and control process and budget

Whether you have a formal project control system in place or you do your own regular check-ups, try to maintain a big-picture perspective so that you don't become engulfed by details and petty problems. Respond quickly to changes as they come in, and look for early signs of problems so you can initiate corrective action. Otherwise, all you are doing is monitoring, not exercising control. Make it clear to your team that your responses to problems that arise won't do any good if you don't receive timely information. Watch the real numbers as they roll in to ensure that they are matching the budgeted amounts.

#### **Report progress**

Stakeholders will generally want regular updates and status reports in prefix format. Don't hide or downplay problems as they come up, or you can easily transform them into crisis. If you keep your stakeholders informed, they may turn out to be good resources when issues do arise.

#### Hold weekly team meetings

You and your team can stay focused by meeting once a week and periodically asking yourselves what's essential to the project's success. Set clear agendas for your meetings. Many of your agenda items will naturally stem from targets the project has missed, met, or exceeded. Keep the momentums going by following up each week on any to-dos and connecting them with the metrics for overall performance. Also, celebrate small successes along the way—that will rekindle the team's enthusiasm as you make progress towards your larger objectives.

#### Manage problems

Some problems have such far-reaching consequences that they can threaten the success of the entire project. The most common are: time slippage, scope creep, quality issues, and people problems. Pay attention to small signs of emerging problems, such as a team member's increased tension and irritability, loss of enthusiasm, or inability to make decisions. When you see signs like these, get to the heart of the problem quickly and deal with it. Don't let it grow from a small irritant into a disaster.



**Deliver Results** 

#### **Closeout: How to Handle End Matters**

Though some projects feel endless, they all, eventually, come to a close. How do you, as project manager, know when to make that happen? And how do you go about it?

#### Evaluate project performance

Before closing the project, your team needs to meet its goals. Compare your progress with the scope everyone agreed on at the beginning. That will tell you how well the project has performed—and if there's still work to do. When you discuss your findings with your stakeholders, make sure you reach consensus with them on how "finished" the project is. Keep your scope front and center so everyone uses the same yardstick to measure success.

#### *Close the project*

The steps you take to wrap things up will depend on whether your team assumes ownership of its own deliverables, hands them off to others in the organization, or must terminate the project altogether. Even if, as is more likely, there are some rough spots along the way—the project takes longer than expected, the result is less than hoped for, or the costs overtake your estimates—it's still important to recognize the team's efforts and accomplishments.

#### Debrief with the team

No matter what the outcome, make sure you have scheduled a post-evaluation—time to debrief and document the process so that the full benefits of lessons learned can be shared. The post-evaluation is an opportunity for discovery, not for criticism and blame. Team members who fear they'll be punished for past problems may try to hide them rather than help find better ways of handling them in the future.

Adapted from Harvard Business Review Guide to Project Management

"Some people are constructive, if you like. Others are destructive. It's this diversity in humankind that results in some making positive contributions and some negative contributions. It's necessary to have enough to make positive contributions to overcome the problems of each age." Jonas Silk



SPML Infra Limited

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